IN THE CLAIMS:

Please amend claim 23 as follows:

1. (Cancelled)

2. (Cancelled)

3. (Cancelled)

4. (Cancelled)

5. (Cancelled)

6. (Cancelled)

7. (Cancelled)

8. (Cancelled)

9. (Cancelled)

10. (Cancelled)

11. (Cancelled)

12. (Cancelled)

13. (Previously Presented) A method for processing an audio signal, comprising the steps of:

band-limiting the received audio signal to generate a first intermediate signal;

multiplying the first intermediate signal by a correction factor to generate a second intermediate signal;

amplifying the second intermediate signal by an amplification factor to generate a third intermediate signal;

limiting the amplitude of the third intermediate signal to a threshold value to generate a fourth intermediate signal;

providing the correction factor as a feedback signal that is a function of the third intermediate signal;

band-limiting the fourth intermediate signal to generate a fifth intermediate signal; and

adding the fifth intermediate signal to the received audio signal.

14. (Previously Presented) The method of claim 13, further comprising the step of:

adjusting the correction factor based on whether the third intermediate signal exceeds the threshold value.

15. (Previously Presented) The method of claim 14, where the step of adjusting the correction factor further comprises the step of:

reducing the correction factor when the third intermediate signal exceeds the threshold value.

16. (Previously Presented) The method of claim 14, where the step of adjusting the correction factor further comprises the step of:

increasing the correction factor when the third intermediate signal is less than the threshold value.

17. (Previously Presented) The method of claim 14, where the step of adjusting the correction factor further comprises the steps of:

generating a control variable based on the amplitude of the third intermediate signal; and

generating the correction factor as a function of the control variable.

18. (Previously Presented) The method of claim 17, where the step of generating the correction factor as a function of the control variable further comprises the step of low-pass filtering the control variable to generate the correction factor.

19. (Previously Presented) The method of claim 13, where the step of limiting the amplitude of the third intermediate signal to a threshold value comprises the steps of:

generating harmonics of low-frequency signal components of the received audio signal; and

weighting the harmonics with a variable factor.

20. (Previously Presented) The method of claim 19, where the step of weighting the harmonics with a variable factor further comprises the step of:

generating the variable factor as a function of the third intermediate signal.

21. (Previously Presented) The method of claim 19, where the step of generating harmonics further comprises the step of:

increasingly generating harmonics at the beginning of a low-frequency signal.

22. (Previously Presented) The method of claim 20, where the step of generating the variable factor as a function of the third intermediate signal further comprises the steps of:

detecting a peak value of the third intermediate signal in accordance with a predetermined function of the third intermediate signal to generate a sixth intermediate signal;

low-pass filtering the sixth intermediate signal separately with first and second time constants to generate first and second low-pass filtered signals; and

generating a difference signal between the first and second low-pass filtered signals, where the difference signal is generated as the variable factor.

23. (Currently Amended) The method of claim 22, where the step of weighting further comprises the steps of:

determining an absolute value of the third intermediate signal;

multiplying the absolute value of the third intermediate signal with the variable factor to generate a seventh intermediate signal;

adding to the third intermediate signal to the seventh intermediate signal to form an eighth intermediate signal; and

limiting amplitudes of the eighth intermediate signal to a specified value.

24. (Previously Presented) A circuit for processing an input audio signal received at an input of the circuit to provide at an output of the circuit a processed audio signal, the circuit comprising:

a first adder having first and second inputs and an output at which the processed audio signal

is provided;

a first conductive path connecting the circuit input to the first input of the first adder, where the first conductive path is constructed and arranged to deliver the received audio signal unaltered to the first adder; and

a second conductive path connecting the circuit input to the second input of the first adder, the second conductive path including,

a first bandpass filter having an output and an input connected to the circuit input;

a multiplier having a first input connected to the first bandpass filter output, and a second input, and an output;

a variable amplifier, having an output and an input connected to the multiplier output, for amplifying a signal received at the amplifier input in accordance with an amplification factor presented at a control input of the amplifier;

a first nonlinear circuit having an output and an input connected to the amplifier output, the nonlinear circuit limiting the amplitude of the amplifier output to a threshold value;

a second bandpass filter having an input connected to the nonlinear circuit output and an output defining output of the second conductive path; and

a first function generator having an input connected to a control output of the first nonlinear circuit, and an output connected to the second input of the multiplier, where the first function generator provides a feedback signal representative of a correction factor to the second input of the multiplier, and where the feedback signal is a function of a signal at the control output of the first nonlinear circuit.

25. (Previously Presented) The circuit of claim 24, where the first function generator comprises a first low-pass filter.

26. (Previously Presented) The circuit of claim 24, where the first nonlinear circuit further comprises:

a second nonlinear circuit having an input and output connected to the input and output, respectively, of the first nonlinear circuit, a control output defining the control output of the first nonlinear circuit, and a control input to which the second nonlinear circuit is responsive; and

a second function generator having an input connected to the input of the first nonlinear circuit and an output connected to the control input of the second nonlinear circuit.

27. (Previously Presented) The circuit of claim 26, where the second function generator comprises:

a peak value detector circuit having an output and an input connected to the second function generator input;

a second low-pass filter having an output and an input connected to the peak value detector output;

a third low-pass filter having an output and an input connected to the peak value detector output;

a subtractor having first and second inputs connected to the outputs of the second and third low-pass filters, respectively, and an output; and

a first limiter circuit having an input connected to the subtractor output, and an output connected to the control input of the second nonlinear circuit.

28. (Previously Presented) The circuit arrangement of claim 27, where the second nonlinear circuit comprises:

an absolute value forming circuit having an output and an input connected to the first nonlinear circuit input;

a second multiplier having a first input connected to the first limiter circuit output and a second input connected to the absolute value forming circuit output;

a second adder having an output, a first input connected to the first nonlinear circuit input, and a second input connected to the second multiplier output; and

a second limiter circuit having an input connected to the second adder output, a control output connected to the first function generator, and an output connected to the second bandpass filter input.

29. (Previously Presented) A circuit for processing an input audio signal received at an input of the circuit to provide at an output of the circuit a processed audio signal, the circuit comprising:

means for band-limiting the received audio signal to generate a first intermediate signal;

means for multiplying the first intermediate signal by a correction factor to generate a second intermediate signal;

means for amplifying the second intermediate signal by an amplification factor to generate a third intermediate signal;

means for limiting the amplitude of the third intermediate signal to a threshold value to generate a fourth intermediate signal;

means for providing the correction factor as a feedback signal that is a function of the third

intermediate signal;

means for band-limiting the fourth intermediate signal to generate a fifth intermediate signal; and

means for adding the fifth intermediate signal to the received audio signal.

30. (Previously Presented) The circuit of claim 29, further comprising:

means for adjusting the correction factor based on whether the third intermediate signal exceeds a predetermined threshold value.

31. (Previously Presented) The circuit of claim 30, where the adjusting means comprises:

means for reducing the correction factor when the third intermediate signal exceeds the predetermined threshold value, and for increasing the correction factor when the third intermediate signal is less than the predetermined threshold value.

32. (Previously Presented) A circuit for processing an input audio signal received at an input of the circuit to provide at an output of the circuit a processed audio signal, the circuit comprising:

a first conductive path through which the received audio signal travels;

a second conductive path through which the received audio signal travels, where the audio signal is processed such that harmonics of the signal components with a low-frequency are generated in the second conductive path and are admixed to the signal in the first path, where in the second path the audio signal is sequentially bandpass filtered, weighted with a correction factor, amplified, limited to a threshold value, and bandpass filtered, where the correction factor is reduced when the threshold value is exceeded, and where the correction factor is provided as a feedback signal that is a

function of the amplified audio signal.